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A REMARKABLE RESPIRATION RECORD IN INFANTILE
PNEUMONIA.*

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—BY—

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H. W., æt. twenty-one months, passed through the first stages of an acute croupous pneumonia under the care of Dr. McHatton, of San Diego, by whom I was called in consultation on the third day of the disease. At this visit the right lung was consolidated from base to apex, and the left base was intensely congested, later running through the stages of croupous pneumonia. The axillary temperature was 104.1°, the pulse 160, and the respiration 60 to the minute. The child survived nine days, during which it was under constant supervision. The appended chart will graphically present this unusual record. The respirations were counted several times by both Dr. James S. Waterman, who was associated in the treatment of the case, and myself, so that the correctness of the observation is beyond doubt.

* Read before the San Diego County Medical Society, January 15, 1892.

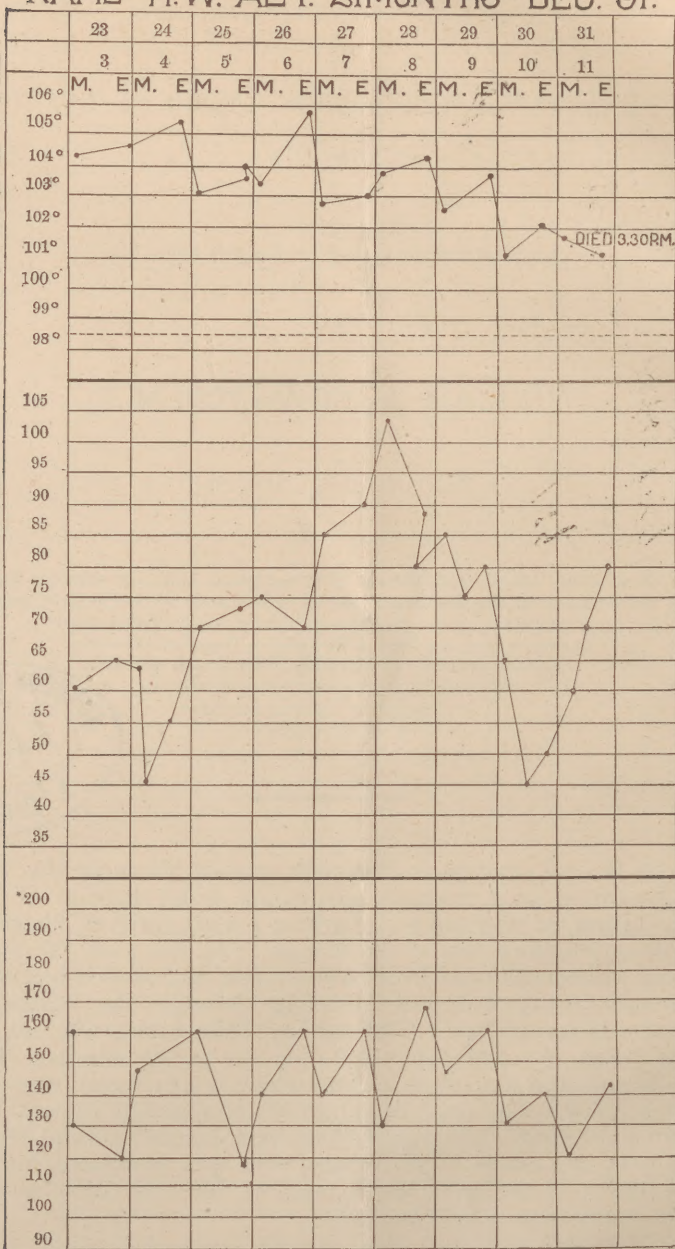
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TEMPERATURE.

RESPIRATION.

PULSE.



In infantile pneumonia it is not unusual to record a respiration rate of 40, or even 50, as for example the nine charted cases of Minot, in Keating's *Cyclopædia*, show respectively a maximum respiration record of 40, 50, 48, 48, 52, 48, 36, 38, 48. The charts presented by Townsend (*ARCHIVES OF PEDIATRICS*, April, 1889, p. 214) show that in all his cases the respiration reached the rate of 40 some time during the disease. The highest rate reached in this series was 85.

The maximum rate presented by our case was 104, and the usual rate, 80. For a period of nine days the respirations never fell below 45 in a minute, but it was usually recorded at the higher rate of 80. It is this remarkable continuance of an unusually high respiratory rate that renders the case worthy of record. Instances of a respiratory rate in infantile pneumonia which are above the one under consideration have been recorded by several observers. Hirst (*Annals of Gynecology and Pediatrics*, December, 1890, p. 168) records a respiration rate of 127 in a very young infant, with recovery. The age of this child is not given, nor is mention made of the duration of this extraordinary respiratory action. Goodhart, in the recent edition of his book, says that the respirations may rise to 60 or 70 a minute.

The case also illustrates the statement which has been made that the child with pneumonia, while breathing very rapidly, still breathes with ease in comparison with one affected by bronchitis, who presents the same respiratory record.

The child, of course, used the extraordinary muscles of respiration, and the *alæ nasi* were dilated during inspiration and were contracted during expiration, a condition that some writers have considered pathognomonic of infantile pneumonia.

The temperature, while not as high as other records, is still worthy of consideration from its unusual duration.

In Winsey's case, *Maryland Medical Journal*, July 28, 1888 (*Sajou's Annual*), of pneumonia in a girl aged thirteen, the temperature was 106° F. for sixty hours. He adds that the highest recorded temperature with recovery was 107°. Smith says that Squire has observed a temperature of 107° F. in a fatal case of pneumonia in a child, and Dessau (*ARCHIVES OF PEDIATRICS*, December, 1891, p. 656) has noted an initial temperature of 107° F., followed by recovery. An examination of Townsend's temperature charts shows a continued high

temperature of about 104° , with little or no remission. The highest temperature reached was 106.2° F. in one instance.

As is shown by the chart, the pulse-respiration ratio was seriously interfered with. Throughout the nine days of illness, during which the child was under my direct observation, the loss of flesh was very slight, if any at all; nutrition was but slightly interfered with, and the child took nourishment with evident relish. A symptom that in my experience has arisen often enough just before death in children from respiratory obstruction to merit attention, is the desire and attempt on the child's part to bite the attendants. This condition arose in the present case eighteen hours before death, when the little fellow made a savage attempt on my hand while taking the pulse. I have notes of nine other similar conditions arising before death in diphtheria and pneumonia. The patient had a sudden convulsion and died apparently from respiratory and cardiac exhaustion. We will not discuss here the relation of the high temperature to this fatal convulsion.



